

**ARIZONA GAME AND FISH DEPARTMENT  
HERITAGE DATA MANAGEMENT SYSTEM**

 **Int Abstract**

**Element Code:** PMCYP032T0

**Data Sensitivity:** No

**CLASSIFICATION, NOMENCLATURE, DESCRIPTION, RANGE**

**NAME:** *Carex chihuahuensis* Mack.

**COMMON NAME:** Chihuahuan sedge

**SYNONYMS:**

**FAMILY:** Cyperaceae

**AUTHOR, PLACE OF PUBLICATION:** K.K. Mackenzie, Bull. Torrey Bot. Club. 35(5): 265-266. 1908.

**TYPE LOCALITY:** Moist places, Puerta de St. Diego [Puerta de Santiago], Chihuahua, Mexico. 1981 m.

**TYPE SPECIMEN:** HT: NY-7075. C.V. Hartman 620, 12 April 1891. IT: US.

**TAXONOMIC UNIQUENESS:** The genus *Carex* contains approximately 1,100 species worldwide (Smith 1977), and 490 species in North America (USDA, NRCS 2002). Fifty-eight species of *Carex* are recognized by Lehr (1978 and Lehr et al 1980) as occurring in Arizona.

**DESCRIPTION:** A grass-like perennial plant. Loosely cespitose with long rhizomes, often forming large tussocks. Stems 2-4 dm high, slender, exceeding the leaves, aphyllopodic. Leaves 2-3 mm wide. Inflorescence 2-7 cm long, 7-15 mm wide, ovoid or oblong with many, densely aggregated (or the lower separate), sessile, androgynous spikes, 6-15 mm long, 3-6 mm wide, the spikes simple or somewhat compound. Bracts scale-like, the lower somewhat prolonged. Pistillate scales oblong-ovate, obtuse, brown or light brownish with paler center and white-hyaline margins, as wide as, but somewhat shorter than the perigynia. Perigynia plano-convex, narrowly ovate, deltoid, widest near the bottom, 3-3.5 mm long, 1-1.5 mm wide, straw-colored or yellowish-brown-tinged, sharp margined, conspicuously several-veined dorsally, less so ventrally, short-stipitate, serrulate above the middle, tapering into a serrulate, deeply bidentate beak 1/4 to 1/3 the length of the body. Stigmas 2 (Fritts 1998).

**AIDS TO IDENTIFICATION:** *Carex chihuahuensis* can be most easily distinguished from *C. occidentalis*, by its perigynia. It's larger (3.5 mm vs. 2.5-3.5 mm), broadest at the base (vs. broad well above the base), tapering into the beak (vs. abruptly contracted into the beak), and sharp-edged without raised margins (vs. raised margins) (Kearney et al 1960).

**ILLUSTRATIONS:** Line draw of plant and parts (H.C. Creutzburg, *in* TAMU image page at

<http://www.csd.tamu.edu/FLORA/carex/k2325200.htm>

**TOTAL RANGE:** From southeastern Arizona, Hidalgo County, New Mexico, and Sonora, and Chihuahua, Mexico.

**RANGE WITHIN ARIZONA:** Cochise County: Chiricahua and Huachuca Mountains, and San Bernardino Valley; Graham County: Pinaleno Mountains; Gila County: Sierra Anchas; Pima County: Santa Catalina, San Luis and Rincon Mountains; Santa Cruz County: Atascosa and Santa Rita Mountains, and Santa Cruz River.

### **SPECIES BIOLOGY AND POPULATION TRENDS**

**GROWTH FORM:** Herbaceous graminoid perennial.

**PHENOLOGY:** April to August.

#### **BIOLOGY:**

**HABITAT:** Wet soil in streambeds, shallower draws in pine-oak forest and riparian woodland (Bowers and McLaughlin 1985). Wet meadows, cienegas, marshy areas, canyon bottoms.

**ELEVATION:** In Arizona, the elevation ranges from 3,600 - 7,200 feet (1098-2196 m). For the range, the elevation is about 1,109 - 8,000 feet (338-2400 m).

**EXPOSURE:** North and northwest facing slopes.

**SUBSTRATE:** Damp sand, mud, among rocks, streambeds; colluvial slope overlain by boulders, sediment, or granite bedrock, and underlain by alluvium. Granite-gneiss.

**PLANT COMMUNITY:** Found in pine oak forests and riparian woodlands. Associated species may include: *Acer grandidentatum* (big-toothed maple), *Alnus oblongifolia* (Arizona alder), *Amsonia grandiflora* (Arizona slimpod), *Aquilegia chrysantha* (golden columbine), *Asclepias angustifolia* (Arizona milkweed), *Ambrosia* sp. (bursage), *Baccharis salicifolia* (willow-leaf false-willow), *Celtis reticulata* (netleaf hackberry), *Cupressus arizonica* (Arizona cypress), *Eleocharis* sp. (spikerush), *Equisetum arvense* (field horsetail), *E. hiemale* (scouring rush), *Fraxinus velutina* (velvet ash), *Juglans* sp. (walnut), *Juncus* sp. (rush), *Mimulus guttatus* (common large monkey-flower), *Pinus cembroides* (Mexican pinyon), *P. ponderosa* (ponderosa pine), *Platanus wrightii* (Wright sycamore), *Populus fremontii* (Fremont cottonwood), *Polypogon monspeliensis* (annual rabbit-foot grass), *Quercus arizonica* (Arizona oak), *Q. emoryi* (Emory's oak), *Q. hypoleucoides* (silver-leaf oak), *Ranunculus macranthus* (large butter-cup), *Salix bonplandiana* (a willow), *S. gooddingii* (Goodding willow), *Scutellaria potosina* (Mexican scullcup), *Toxicodendron radicans* (eastern poison ivy), *Veronica anagalis-aquatica* (brook-pimpernell), and *Vitis arizonica* (Arizona grape).

**POPULATION TRENDS:** Unknown

### **SPECIES PROTECTION AND CONSERVATION**

**ENDANGERED SPECIES ACT STATUS:** None  
**STATE STATUS:** None  
**OTHER STATUS:** Forest Service Sensitive (USDA, FS Region 3 1999)

**MANAGEMENT FACTORS:**

**PROTECTIVE MEASURES TAKEN:**

**SUGGESTED PROJECTS:**

**LAND MANAGEMENT/OWNERSHIP:** DOD-Fort Huachuca Military Reservation; NPS - Saguaro National Park and Chiricahua National Monument; USFS - Coronado and Tonto National Forests; AMNH Southwestern Research Station; Johnson Historical Museum (San Bernardino Ranch); Private.

### **SOURCES OF FURTHER INFORMATION**

#### **REFERENCES:**

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#### MAJOR KNOWLEDGEABLE INDIVIDUALS:

#### ADDITIONAL INFORMATION:

"Many species, especially those with rhizomes, are invasive. This is one of the most effective genera for knitting moist or wet soil" (Hickman 1993).

**Revised:** 1999-11-03 (LBK)  
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